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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
TRAN, THAI Q	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/081,776	BARTON ET AL.	
	Examiner	Art Unit	
	Thai Tran	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 March 2005 and 06 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-58* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 February 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/6/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/18/2005 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-58 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 20-24, 48-52, and 57-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hooper et al (US 5,442,390).

Regarding claim 20, Hooper et al discloses a process for a digital video recorder (Fig. 1), comprising the steps of:

storing a plurality of multimedia programs in digital form on a storage device (library server 23 disclosed in col. 4, lines 18-28);

displaying a list of pre-recorded multimedia programs stored on said storage device to a user (menu of available titles disclosed in col. 8, lines 13-22);

wherein the user selects multimedia programs form said list (selecting video for viewing disclosed in col. 8, lines 13-28);

simultaneously playing back at least one of said selected multimedia programs and a multimedia program whose storage is in progress to at least one television monitor (col. 8, lines 13-22); and

wherein said playing back step allows playback rate and direction of each multimedia program to be controlled individually and simultaneously to perform variable rate fast forward and rewind, pause, and playback functions (col. 3, lines 37-41).

However, Hooper et al does not specifically discloses the frame step VCR function.

However, VCR frame step function is old and well known in the art and; therefore, Official Notice is taken.

It would have been obvious to one of ordinary skill in the art at the time of the invention to the well known VCR frame step function into Hooper et al's system in order to allow user to observe one frame at a time.

Regarding claim 21, Hooper et al discloses the claimed wherein said playing back step converts said at least two of said multimedia program into television output signals (decoder 803 of Fig. 11, col. 14, lines 44-54).

Regarding claim 22, Hooper et al discloses the claimed step of inserting on-screen displays into a television output signal (menu of available titles disclosed in col. 8, lines 13-22).

Regarding claim 23, Hooper et al discloses the claimed wherein a user controls the playback rate and direction of a multimedia program through a remote control (col. 3, lines 47-58).

Regarding claim 24, Hooper et al does not discloses the claimed step of providing a multimedia recording device, wherein said playing back step sends a multimedia program to said multimedia recording device, allowing a user to record said multimedia program.

It is further noted that VCR or VTR is used for recording video signal is old and well known in the art and; therefore, Official Notice is again taken.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the well known VCR or VTR into Hooper et al's system in order to record the video signal for later use.

Regarding claim 57, Hooper discloses all the claimed limitations as discussed in claim 20 above except for providing the claimed wherein said playing back step plays back said at least two of said multimedia programs in a picture in a picture format to a television monitor.

The capability of displaying video programs in a picture in a picture format is old and well known in the art and; therefore, Official Notice is taken.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the well known picture-in-picture into Hooper et al's system in order to allow the user to view two different video programs on the single screen.

Apparatus claims 48-52 and 58 are rejected for the same reasons as discussed in method claims 20-24 and 57 above, respectively.

4. Claims 8-11, 13-17, 19, 36-39, 41-45, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al (RE. 36,801) in view of Hooper et al (US 5,442,390).

Regarding claim 8, Logan discloses a process for a digital video recorder (Fig. 1), comprising the steps of:

receiving a plurality of television broadcast signals (col. 3, lines 4-17); and

storing each television broadcast signal in a digital form on a storage device (a dual-port memory subsystem 5 of Fig. 1, col. 3, lines 4-17). However, Logan does not specifically discloses providing a plurality of output devices; wherein each output device extracts a specific digital broadcast signal from said storage device; wherein at least two output devices simultaneously extract different digital broadcast signals; converting each specific digital broadcast signal into a television output signal; sending television output signals to at least one display device; and wherein said converting step allows playback rate and direction of each television output signal to be controlled individually and simultaneously to perform variable rate fast forward and rewind, frame step, pause, and play functions.

Hooper et al teaches a video on demand (Fig. 1) having a plurality of output devices (customer premises equipment (CPE) 10 of Fig. 1, col. 3, lines 4-12); wherein each output device extracts a specific digital broadcast signal from said storage device (col. 8, lines 13-22); wherein at least two output devices simultaneously extract different digital broadcast signals (col. 8, lines 13-22); converting each specific digital broadcast signal into a television output signal (col. 3, lines 47-58); sending television output signals to at least one display device (col. 3, lines 47-58); and wherein said converting step allows playback rate and direction of each television output signal to be controlled individually and simultaneously to perform variable rate fast forward and rewind, pause, and play functions (col. 3, lines 37-41).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the video on-demand as taught by Hooper et al into Logan's device in order to allow multiple users to simultaneously access the video signal recorded on the recording medium.

The proposed combination of Logan and Hooper as proposed does not specifically discloses the frame step VCR function.

However, VCR frame step function is old and well known in the art and; therefore, Official Notice is taken.

It would have been obvious to one of ordinary skill in the art at the time of the invention to the well known VCR frame step function into Hooper et al's system in order to allow user to observe one frame at a time.

Regarding claim 9, Hooper et al also discloses the claimed wherein a user controls the playback rate and direction of a television output signal through a remote control (col. 3, lines 47-58).

Regarding claim 10, the combination of Logan and Hooper et al does not specifically discloses the claimed providing a multimedia recording device, wherein said converting step sends any of a specific digital broadcast signal for a television output signal to said multimedia recording device for recording.

It is further noted that VCR or VTR is used for recording video signal is old and well known in the art and; therefore, Official Notice is again taken.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the well known VCR or VTR into Hooper et al's system in order to record the video signal for later use.

Regarding claim 11, Hooper et al also discloses the claimed step of inserting on-screen displays into a television output signal (menu of available titles disclosed in col. 8, lines 13-22).

Regarding claim 13, Logan also discloses the claimed wherein a television broadcast signal can contain any of: software updates or data (col. 3, lines 4-17(.

Regarding claim 14, Logan discloses a process for a digital video recorder (Fig. 1), comprising the steps of:

receiving a plurality of input streams (col. 3, lines 4-17); and

storing said plurality of input streams in a digital form on a storage device (a dual-port memory subsystem 5 of Fig. 1, col. 3, lines 4-17). However, Logan does not

specifically discloses providing a plurality of output devices; wherein each output device extracts a digital stream from said storage device; wherein at least two output devices simultaneously extract different digital streams; decoding each digital stream into a television output signal; sending television output signals to at least one display device; and wherein said decoding step allows playback rate and direction of each television output signal to be controlled individually and simultaneously to perform variable rate fast forward and rewind, frame step, pause, and play functions.

Hooper et al teaches a video on demand (Fig. 1) having a plurality of output devices (customer premises equipment (CPE) 10 of Fig. 1, col. 3, lines 4-12); wherein each output device extracts a digital stream from said storage device (col. 8, lines 13-22 and col. 5, lines 40-50); wherein at least two output devices simultaneously extract different digital streams (col. 8, lines 13-22); decoding each digital stream into a television output signal (decoder 803 of Fig. 11, col. 14, lines 44-54); sending television output signals to at least one display device (col. 3, lines 47-58); and wherein said converting step allows playback rate and direction of each television output signal to be controlled individually and simultaneously to perform variable rate fast forward and rewind, pause, and play functions (col. 3, lines 37-41).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the video on-demand as taught by Hooper et al into Logan's device in order to allow multiple users to simultaneously access the video signal recorded on the recording medium.

The proposed combination of Logan and Hooper as proposed does not specifically discloses the frame step VCR function.

However, VCR frame step function is old and well known in the art and; therefore, Official Notice is taken.

It would have been obvious to one of ordinary skill in the art at the time of the invention to the well known VCR frame step function into Hooper et al's system in order to allow user to observe one frame at a time.

Claim 15 is rejected for the same reasons as discussed in claim 9 above.

Claim 16 is rejected for the same reasons as discussed in claim 10 above.

Claim 17 is rejected for the same reasons as discussed in claim 11 above.

Claim 19 is rejected for the same reasons as discussed in claim 15 above.

Apparatus claims 36-39, 41-45, and 47 are rejected for the same reasons as discussed in method claims 8-11, 13-17, and 19 above, respectively.

5. Claims 25 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hooper et al in view of Fujita et al ('619 B1).

Regarding claim 25, Hooper et al discloses all the claimed limitations except for providing the claimed step of providing editing means for creating custom sequences of video and/or audio output and wherein said editing means allows any number of video and/or audio segment of multimedia programs to be lined up and combined and stored on said storage device.

Fujita et al teaches an image editing system having editing means for creating custom sequences of video and/or audio output (col. 2, lines 59-65) and wherein said

editing means allows any number of video and/or audio segments of digital broadcast signal to be lined up and combined and stored on said storage device (col. 2, lines 59-65 and Fig. 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the editing system as taught by Fujita et al into Hooper et al's system in order to increase the quality of the video signal by editing the video signal.

Apparatus 53 is rejected for the same reasons as discussed in method claim 25 above.

6. Claims 12, 18, 40, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al in view of Hooper et al as applied to claims 8, 14, 36, and 42 above, and further in view of Fujita et al.

Regarding claim 12, the proposed combination of Logan et al and Hooper et al discloses all the claimed limitations except for providing the claimed step of providing editing means for creating custom sequences of video and/or audio output and wherein said editing means allows any number of video and/or audio segments of digital broadcast signals to be lined up and combined and stored on said storage device.

Fujita et al teaches an image editing system having editing means for creating custom sequences of video and/or audio output (col. 2, lines 59-65) and wherein said editing means allows any number of video and/or audio segments of digital broadcast signal to be lined up and combined and stored on said storage device (col. 2, lines 59-65 and Fig. 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the editing system as taught by Fujita et al into Hooper et al's system in order to increase the quality of the video signal by editing the video signal.

Claim 18 is rejected for the same reasons as discussed in claim 12 above.

Apparatus claim 40 is rejected for the same reasons as discussed in method claim 12 above.

Apparatus claim 46 is rejected for the same reasons as discussed in method claim 12 above.

7. Claims 1-4, 6-7, 26-32, 34-35, and 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al in view of Hooper et al and further in view of Kobayashi et al ('254).

Regarding claim 1, Logan et al and Hooper et al discloses all the claimed limitations as discussed in claim 8 above except for providing separating a digital signal for digital television broadcast signal into its video and audio components.

Kobayashi et al teaches a digital video audio processing apparatus having means for separating the digital multimedia program into its video and audio components so that the video and audio signals can be processed separately from the serial digital video signal in which audio signal is mixed (col. 3, lines 49-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the switching system as taught by Kobayashi et al into Logan et al's system in order to increase the flexibility of the system of Logan et al by allowing the operator or user to modify for change the video and audio signal as desired.

Regarding claim 2, Hooper et al discloses the claimed wherein a user controls the playback rate and direction of a television output signal through a remote control (col. 3, lines 47-58).

Regarding claim 3, the combination of Logan et al, Hooper et al, and Kobayashi et al does not discloses the claimed step of providing a multimedia recording device, wherein said decoding step sends any of a specific video and audio component or a television output signal to said multimedia recording device for recording.

It is further noted that VCR or VTR is used for recording video signal is old and well known in the art and; therefore, Official Notice is again taken.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the well known VCR or VTR into Hooper et al's system in order to record the video signal for later use.

Regarding claim 4, Hooper et al discloses the claimed step of inserting on-screen displays into a television output signal (menu of available titles disclosed in col. 8, lines 13-22).

Regarding claim 6, Kobayashi et al also discloses the claimed providing means for synchronizing video and audio components for proper playback (col. 3, line 66 to col. 4, line 7).

Regarding claim 7, Logan et al discloses the claimed wherein an input signal tuner receives any of: software updates or data (col. 3, lines 4-17).

Claim 26 is rejected for the same reasons as discussed in claim 1 above.

Claim 27 is rejected for the same reasons as discussed in claim 6 above.

Claim 28 is rejected for the same reasons as discussed in claim 7 above.

Apparatus claims 29-32, 34-35, and 54-56 are rejected for the same reasons as discussed in method claims 1-4, 6-7, and 26-28 above, respectively.

8. Claims 5 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al in view of Hooper et al and Kobayashi et al as applied to claims 1 and 29 above, and further in view of Fujita et al.

Regarding claim 5, the proposed combination of Logan et al, Hooper et al, and Kobayashi et al discloses all the claimed limitations as discussed in claim 1 above except for providing the step of providing editing means for creating custom sequences of video and/or audio output and wherein said editing means allows any number of video and/or audio segments to be lined up and combined and stored on said storage device.

Fujita et al teaches an image editing system having editing means for creating custom sequences of video and/or audio output (col. 2, lines 59-65) and wherein said editing means allows any number of video and/or audio segments of digital broadcast signal to be lined up and combined and stored on said storage device (col. 2, lines 59-65 and Fig. 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the editing system as taught by Fujita et al into Hooper et al's system in order to increase the quality of the video signal by editing the video signal.

Apparatus claim 33 is rejected for the same reasons as discussed in method claim 5 above.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Tran whose telephone number is (571) 272-7382. The examiner can normally be reached on Mon. to Friday, 8:00 AM to 5:30 PM.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTQ